Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of delivering a compound into a matrix of a biofilm, the method comprising:

(a) contacting the biofilm with the compound; and

(b) propagating a sufficient number of stress waves into the biofilm to increase the permeability of the biofilm, thereby enabling the compound to pass into the matrix of the biofilm.

2. (Original) The method of claim 1, wherein at least one of the stress waves is a broad-band compressive wave having a rise time of at least 500 ps and a peak pressure of at least 50 bar.

3. (Original) The method of claim 1, wherein the stress wave has a peak pressure of 550-650 bar.

4. (Original) The method of claim 1, wherein the stress wave has a rise time of about 10-100 ns.

5. (Original) The method of claim 1, wherein the stress wave is generated by coupling a target material to the biofilm and exposing the target material to a pulsed laser beam.

6. (Original) The method of claim 5, wherein the laser beam has a wavelength between about 140 nm and about 12 μm.

7. (Original) The method of claim 5, wherein a transparent material is bonded to a surface of the target material.

8. (Currently Amended) The method of claim 5, wherein the target material ~~comprises~~ is selected from a group consisting of a metal foil, a plastic, ~~or~~ and an energetic material.

9. (Currently Amended) The method of claim 8, wherein the metal foil comprises a metal selected from a group consisting of aluminum ~~or~~ and copper.

10. (Original) The method of claim 5, wherein the target material comprises a polymer.

11. (Currently Amended) The method of claim 5, wherein the target material ~~is~~ comprises polystyrene.

12. (Currently Amended) The method of claim 5, wherein the target material comprises a material that absorbs laser energy, and wherein the stress wave is generated by laser-induced ~~rapid~~ heating of the absorbing material.

13. (Currently Amended) The method of claim 1, wherein the compound ~~is~~ comprises an antimicrobial agent.

14. (Original) The method of claim 1, wherein the biofilm comprises one or more bacteria or products thereof.

15. (Original) The method of claim 1, wherein the biofilm comprises one or more bacterial capsular polysaccharides.

16. (Original) The method of claim 1, wherein the biofilm comprises a microorganism or product thereof selected from the group consisting of an *Actinomycete* spp. or a product thereof, *A. viscosus* or a product thereof, or *P. gingivalis* or a product thereof.

17. (Original) The method of claim 1, wherein the biofilm comprises one or more fungi or products thereof.

18. (Original) The method of claim 1, wherein the biofilm comprises one or more protozoa or

products thereof.

19. (Original) The method of claim 1, wherein the compound is provided in a reservoir containing a coupling medium suitable for mixing with the compound, wherein the reservoir is arranged to enable the coupling medium to directly contact a surface of the biofilm.

20. (Original) The method of claim 19, wherein the coupling medium further comprises a surfactant.

21. (Original) The method of claim 20, wherein the surfactant is sodium lauryl sulfate.

22. (Original) The method of claim 1, wherein the biofilm is associated with an enamel surface, a periodontal pocket, a tracheal surface, or an internal organ surface of a mammal.

23. (Original) The method of claim 22, wherein the mammal is a human.

24. (Currently Amended) The method of claim 1, wherein the compound ~~is~~ comprises an antimicrobial agent, and wherein the agent is delivered into the matrix of the biofilm by contacting the biofilm with the antimicrobial agent, and exposing a target material disposed on the biofilm to a pulsed laser beam, thereby propagating one or more stress waves through the biofilm contacting the ~~bioactive~~ antimicrobial agent, thereby causing the antimicrobial agent to ~~pass through the biofilm~~ enter the matrix.

25. (Original) A method of permeabilizing a biofilm, the method comprising exposing the biofilm to a sufficient number of stress waves effective to permeabilize the biofilm.

26. (Currently Amended) A method of treating disorders associated with a biofilm, the method comprising exposing the biofilm to one or more stress waves sufficient to permeabilize the biofilm, and then delivering a therapeutic agent into ~~the~~ a matrix of the biofilm, thereby treating the disorder associated with the biofilm.

27. (Currently Amended) The method of claim 26, wherein the therapeutic agent ~~is~~ comprises

an antimicrobial agent.